

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re application of: STEARNS et al.

Attorney Docket No.:
XENOP009/PXE-011.US

Application No.: 10/606,976

Examiner: MADDEN, GREGORY
VINCENT

Filed: June 25, 2003

Title: METHOD AND APPARATUS FOR 3-D
IMAGING OF INTERNAL LIGHT SOURCES

Group: 2622

Confirmation No.: 6444

CERTIFICATE OF MAILING

I hereby certify that this correspondence is being deposited with the U.S. Postal Service with sufficient postage as first-class mail on October 10, 2006 in an envelope addressed to the Commissioner for Patents, P.O. Box 1450 Alexandria, VA 22313-1450.

Signed: _____


Laura M. Dean

**INFORMATION DISCLOSURE STATEMENT
37 CFR §§1.56 AND 1.97(b)**

Mail Stop Amendment
Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450

Dear Sir:

The references listed in the attached PTO Form 1449, copies of non-U.S. documents are attached, may be material to examination of the above-identified patent application. Applicants submit these references in compliance with their duty of disclosure pursuant to 37 CFR §§1.56 and 1.97. The Examiner is requested to make these references of official record in this application.

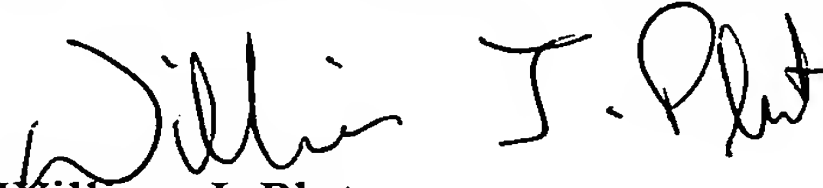
This Information Disclosure Statement is not to be construed as a representation that a search has been made, that additional information material to the examination of this application does not exist, or that these references indeed constitute prior art.

This Information Disclosure Statement is: (i) filed within three (3) months of the filing date of the above-referenced application, (ii) believed to be filed before the mailing date of a first Office Action on the merits, or (iii) believed to be filed before the mailing of a first Office Action after the filing of a Request for Continued Examination under §1.114. Accordingly, it is believed that no fees are due in connection with the filing of this Information Disclosure

Statement. However, if it is determined that any fees are due, the Commissioner is hereby authorized to charge such fees to Deposit Account 500388 (Order No. XENOP009).

Respectfully submitted,

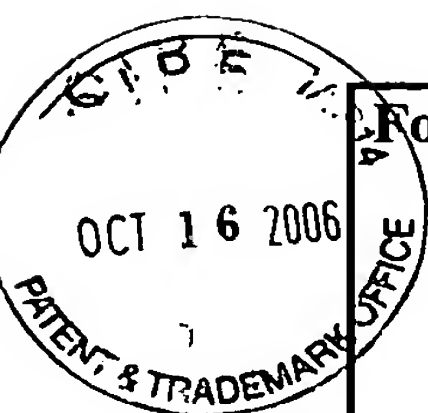
BEYER WEAVER & THOMAS, LLP

A handwritten signature in black ink, appearing to read "William J. Plut". The signature is fluid and cursive, with the first name "William" and last name "Plut" clearly distinguishable.

William J. Plut

Limited Recognition Registration No. L0079

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Form 1449 (Modified)		Atty Docket No. XENOP009	Application No.: 10/606,976
Information Disclosure Statement By Applicant		Applicant: Stearns et al.	
		Filing Date June 25, 2003	Group 2612
(Use Several Sheets if Necessary)			

U.S. Patent Documents

Examiner Initial	No.	Patent No.	Date	Patentee	Class	Sub-class	Filing Date
	A1	5,205,291	04/27/93	Potter			10/07/91
	A2	5,242,441	09/07/93	Avitall			02/24/92
	A3	5,334,193	08/02/94	Nardella			11/13/92
	A4	5,584,872	12/17/96	LaFontaine et al.			03/11/94
	A5	5,650,135	07/22/97	Contag et al.			07/01/94
	A6	6,217,847	04/17/01	Benaron et al.			01/19/99

Foreign Patent or Published Foreign Patent Application

Examiner Initial	No.	Document No.	Publication Date	Country or Patent Office	Class	Sub-class	Translation	
							Yes	No
	B1	WO98/34533	08/13/98	PCT				
	B2	WO01/18225	03/15/01	PCT				
	B3	WO00/54581	09/21/00	PCT				
	B4	WO0036106	06/22/00	PCT				
	B5	WO97/40381	10/30/97	PCT				
	B6	WO01/63247	08/30/01	PCT				

Other Documents

Examiner Initial	No.	Author, Title, Date, Place (e.g. Journal) of Publication
	C1	ACHILEFU et al., "Novel Receptor-Targeted Fluorescent Contrast Agents for In Vivo Tumor Imaging", Investigative Radiology, Volume 35(8), August 200, pp479-485.
	C2	ARRIDGE, "Photon-Measurement Density Functions. Part 1: Analytical Forms", Applied Optics, Volume 34, No.31, November 1, 1995, pp7395-7409.
	C3	ARRIDGE, "Photon-Measurement Density Functions. Part II: Finite-Element-Method Calculations", Applied Optics, Volume 34, No.34, December 1, 1995, pp8026-8037.
Examiner		Date Considered

Examiner: Initial citation considered. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

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Other Documents

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	C4	BECKER et al., "receptor-Targeted Optical Imaging of Tumors with Near-Infrared Fluorescent Ligands", Nature Biotechnology, Volume 19, April 2001, pp327-330.
	C5	BEVILACQUA et al., "Monte Carlo Study of Diffuse Reflectance at Source-Detector Separations Close to One Transport Mean Free Path", Optical Society of America, Volume 16, No. 12, December 1999, pp2935-2945.
	C6	BEVILACQUA et al., "In Vivo Local Determination of Tissue Optical Properties: Applications to Human Brain", Applied Optics, Volume 38, No. 22, August 1, 1999, pp4939-4950.
	C7	BOUVET et al., "Real-Time Optical Imaging of Primary Tumor Growth and Multiple Metastatic Events in a Pancreatic Cancer Orthotopic Model", Cancer Research, Volume 62, March 1, 2002, pp1534-1540.
	C8	CHANG et al., "Improved Reconstruction Algorithm for Luminescence Optical Tomography When Background Lumiphore is Present", Applied Optics, Volume 37, No. 16, June 1, 1998, pp3547-3552.
	C9	CHEONG et al., "A review of the Optical Properties of Biological Tissues", IEEE Journal of Quantum Electronics, Volume 26, No.12, December 1990, pp2166-2185.
	C10	CONTAG et al., "Use of Reporter Genes for Optical Measurements of Neoplastic Disease In Vivo", Neoplasia, Vol. 2, Nos. 1-2, January-April 2000, pp41-52.
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	C11	CONTAG et al., "Photonic Detection of Bacterial Pathogens in Living Hosts", Molecular Microbiology, Volume 18, No.4, 1995, pp593-603.
	C12	EPPSTEIN et al., "Biomedical Optical Tomography Using Dynamic Parameterization and Bayesian Conditioning on Photon Migration Measurements", Applied Optics, Volume 38, No. 10, April 1, 1999, pp2138-2150.
	C13	FRANCIS et al, " Visualizing Pneumococcal Infections in the Lungs of Live Mice Using Bioluminescent Streptococcus Pneumoniae Transformed with a Novel Gram-Positive lux Transposon", Infection and Immunity, Volume 69, No.5, pp3350-3358.
	C14	HASKELL et al., " Boundary Condition for the Diffusion Equation in Radiative Transfer", Optical Society of America, Vol. 11, No. 10, October 1994, pp2727-2741.
	C15	HASTINGS, "Chemistries and Colors of Bioluminescent Reactions: a Review", Gene, Volume 173, 1996, pp5-11.
	C16	HAWRYSZ et al., "Developments Toward Diagnostic Breast Cancer Imaging Using Near-Infrared Optical Measurements and Fluorescent Contrast Agents", Neoplasia, Volume 2, No. 5 September-October, 2000, pp388-417.
	C17	ISHIMARU, "Wave Propagation and Scattering in Random Media", Volume 1, Single Scattering and Transport Theory, Academic Press, 1978.
	C18	ISHIMARU, "Wave Propagation and Scattering in Random Media", Volume 2, Multiple Scattering Turbulence Rough Surfaces and Remote Sensing, Academic Press, 1978.
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	C19	KIENLE, Noninvasive Determination of the Optical Properties of Two-Layered Turbid Media", Applied Optics, Volume 37, No. 4, February 1, 1998, pp779-791.
	C20	MASON (editor), "Biological Techniques: Fluorescent and Luminescent Probes for Biological Activity: A Practical Guide to Technology for Quantitative Real-Time Analysis", Second Edition, Academic Press, 1999.
	C21	NTZIACHRISTOS et al., "Experimental Three-Dimensional Fluorescence Reconstruction of Diffuse Media by Use of a Normalized Born Approximation", Optical Society of America, Volume 26, No. 12, June 15, 2001, pp893-895.
	C22	NTZIACHRISTOS et al., "Fluorescence Molecular Tomography Resolves Protease Activity In Vivo", Nature Medicine, Volume 8, No. 7, July 2002, pp757-760.
	C23	PRAHL et al., "Determining the Optical Properties of Turbid Media by Using the Adding-Doubling Method", Applied Optics, Volume 32, No. 4, February 1, 1993, pp559-568.
	C24	REHEMTULLA et al., "Rapid and Quantitative Assessment of Cancer Treatment Response Using In Vivo Bioluminescence Imaging", Neoplasia, Volume 2, No. 6, 2000, pp491-495.
	C25	RESEARCH & DEVELOPMENT (magazine), Volume 42, No. 9, September 2000, Part 1 of 2.
	C26	RICE et al., "In Vivo Imaging of Light-Emitting Probes", Journal of Biomedical Optics, Volume 6, No. 4, October 2001, pp432-440.
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	C27	TAKEDA et al., "Fourier-Transform Method of Fringe-Pattern Analysis for Computer-Based Topography and Interferometry", Optical Society of America, Volume 72, No. 1, January 1982, pp156-160.
	C28	TUCHIN, "Tissue Optics: Light Scattering Methods and Instruments for Medical Diagnosis", SPIE Press, 2000.
	C29	WEISSLEDER et al., "In Vivo Imaging of Tumors with Protease-Activated Near-Infrared Fluorescent Probes", Nature Biotechnology, Volume 17, April 1999, pp375-378.
	C30	WU et al., "Noninvasive Optical Imaging of Firefly Luciferase Reporter Gene Expression in Skeletal Muscles of Living Mice", Molecular Therapy, Volume 4, No. 4, October 2001, pp297-306.
	C31	YANG et al., "Whole-Body Optical Imaging of Green Fluorescent Protein-Expressing Tumors and Metastases", PNAS, Volume 97, No. 3, February 1, 2000, pp1206-1211.
	C32	ZHANG et al., "Rapid In Vivo Functional Analysis of Transgenes in Mice Using Whole Body Imaging of Luciferase Expression", Transgenic Research, Volume 10, 2001, pp423-434.
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